

REMARKS

The office action of June 7, 2005 has been carefully reviewed and these remarks are responsive thereto. Reconsideration and allowance of the instant application are respectfully requested. Claims 1, 2, 4, 9, 20, and 22 have been amended. Claims 1-23 are pending.

Rejection under 35 U.S.C. § 102(e) Over Kikuchi

Claims 1, 7, 9, and 18 stand rejected under 35 U.S.C. 102(e) as being anticipated by Kikuchi (JP 57058501). Kikuchi is cited for teaching a tire construction in which the tire cavity is entirely filled with a solution of liquid polyurethane and rubber powder.

Independent claim 1 has been amended to recite a method that provides for pumping a solution of core bits and liquid virgin polyurethane into a tire. Kikuchi does not teach or suggest pumping a solution of core bits and liquid virgin polyurethane into a tire. While Kikuchi is cited for a tire construction in which the tire cavity is entirely filled with a solution of liquid polyurethane and rubber powder, this disclosure fails to describe pumping a solution of the liquid virgin polyurethane and core bits into a tire core. Kikuchi is directed to method of mixing rubber powder and liquid polyurethane, whipping (agitating) the mixture with a mixer to get a specific gravity by allowing air to mix with the mixture and pouring the whipped mixture into a tire until it overflows from the tire. Pumping such a mixture would defeat the purposes of Kikuchi as air would be forced from the mixture and the required specific gravity of the mixture eliminated. Kikuchi then uses oven curing and open vulcanization to cure the whipped mixture. The claimed invention pumps a solution into a tire's core, something that Kikuchi does not teach or describe. The rejection is believed overcome.

Claims 7, 9, and 18 all depend from claim 1 that Kikuchi fails to teach or suggest all limitations. Thereby, Kikuchi fails to teach or suggest all limitations of these claims for the reasons discussed above. The rejection is believed overcome.

Rejection under 35 U.S.C. § 103 Over Kikuchi in view of Staten

Claims 2, 10-12, and 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi as applied to claims 1 and in further view of Staten (US 1,097,824).

Kikuchi does not teach or suggest claim 1 for the reasons identified above and hereby incorporated by reference. Staten does not remedy the defects of Kikuchi as it also fails teach or suggest a method of pumping a solution of core bits and liquid virgin polyurethane into a tire. Staten merely discloses specific embodiments of a certain components (e.g., used vehicle tires and components therein as a source of cure polyurethane). Kikuchi in view of Staten does not teach or suggest the claimed invention. The rejection is believed overcome.

Rejection under 35 U.S.C. § 103 Over Kikuchi in view of Leblanc

Claims 4 and 20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi in further view of Leblanc (US 4,378,879).

Independent claim 20 has been amended to recite a method that provides for pumping a solution of core bits and liquid virgin polyurethane into a tubed tire. Kikuchi does not teach or suggest claims 4 and 20 for the same reasons identified above with respect to claim 1 and hereby incorporated by reference. Leblanc does not remedy the defects of Kikuchi as it also fails teach or suggest a method of pumping a solution of core bits and liquid virgin polyurethane into a tire (or a tubed tire). The cited portions of Leblanc merely disclose specific embodiments of tires (e.g., Fig. 2 is directed to a tubeless and Fig. 4 is directed to a tubed tire). Kikuchi in view of LeBlanc does not teach or suggest the claimed inventions. The rejection is believed overcome.

Rejection under 35 U.S.C. § 103 Over Kikuchi in view of Panaroni

Claims 5, 6, 13-15, and 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi in further view of Panaroni (US 5,524,405).

Kikuchi does not teach or suggest claim 1 for the same reasons identified above with respect to claim 1 and hereby incorporated by reference. Panaroni does not remedy the defects of Kikuchi as it also fails teach or suggest a method of pumping a solution of core bits and liquid virgin polyurethane into a tire. The cited portions of Panaroni merely disclose specific embodiments of chemicals and particle sizes (e.g., specific polyisocyanates). With respect to the Office Action's comments regarding Claim 19, it is believed that the Office Action is taking too

narrow a view of the claimed invention as the “distinct compositions” can refer to different components of a single polyurethane or multiple polyurethanes that are mixed to form a different polyurethane. Kikuchi in view of Panaroni does not teach or suggest the claimed inventions. The rejection is believed overcome.

Rejection under 35 U.S.C. § 103 Over Kikuchi in view of either one of Gohlish and Allard

Claims 16 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi in further view of either one of Gohlish (US 5,362,001) and Allard (US 5,120,767).

Kikuchi does not teach or suggest claim 1 for the same reasons identified above with respect to claim 1 and hereby incorporated by reference. Neither Gohlish nor Allard remedy the defects of Kikuchi as they also fail teach or suggest a method of pumping a solution of core bits and liquid virgin polyurethane into a tire. The cited portions of Gohlish and Allard merely disclose specific embodiments of grinding. Kikuchi in view of either one of Gohlish and Allard does not teach or suggest the claimed inventions. The rejection is believed overcome.

Rejection under 35 U.S.C. § 103 Over Kikuchi and Leblanc in view of Panaroni

Claims 21 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi and Leblanc in further view of Panaroni (US 5,120,767).

Kikuchi and Leblanc do not teach or suggest claim 21 for the same reasons identified above with respect to claim 20 and hereby incorporated by reference. Panaroni does not remedy the defects of Kikuchi and Leblanc as it also fails to teach or suggest a method of pumping a solution of core bits and liquid virgin polyurethane into a tire. The cited portions of Panaroni, as noted above, merely disclose specific embodiments of chemicals and particle sizes. Kikuchi and Leblanc in view of Panaroni do not teach or suggest the claimed inventions. The rejection is believed overcome.

Rejection under 35 U.S.C. § 103 Over Kikuchi in view of Ahmad

Claims 22 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi in further view of Ahmad (US 3,866,652).

Independent claim 22 has been amended to recite a method that provides for pumping a solution of core bits and liquid virgin polyurethane through a valve. Kikuchi does not teach or suggest pumping a solution of core bits and liquid virgin polyurethane. Kikuchi does not teach or suggest claim 22 for the same reasons identified above with respect to claims 1 and 20 and hereby incorporated by reference. Ahmad does not remedy the defects of Kikuchi as it also fails to teach or suggest a method of pumping a solution of core bits and liquid virgin polyurethane into a tire. The cited portions of Ahmad merely discuss pumping a solution of hollow spheres and an elastomeric material. Kikuchi in view of Ahmad does not teach or suggest the claimed inventions. The rejection is believed overcome.

Rejection under 35 U.S.C. § 103 Over Kikuchi and Ahmad in view of either Golish and Allard.

Claims 23 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi in further view of either one of Golish and Allard.


Kikuchi and Ahmad do not teach or suggest claim 23 for the same reasons identified above with respect to claim 22 and hereby incorporated by reference. Neither Gohlish nor Allard remedy the defects of Kikuchi and Ahmad as they also fail teach or suggest a method of pumping a solution of core bits and liquid virgin polyurethane into a tire. The cited portions of Gohlish and Allard merely disclose specific embodiments of grinding. Kikuchi and Ahmad in view of either one of Gohlish and Allard does not teach or suggest the claimed inventions. The rejection is believed overcome.

CONCLUSION

In view of the above amendments and remarks, withdrawal of the rejections and issuance of a Notice of Allowance is requested.

Respectfully submitted,

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By: 
Christopher B. Roth
Registration No. 49,007

BANNER & WITCOFF, LTD.
1001 G Street, N.W.
Washington, D.C. 20001-4597
(202) 824-3000

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